

one or more intermediate appliances having geometries selected to progressively reposition the teeth from the first intermediate arrangement to successive intermediate arrangements; and

a final appliance having a geometry selected to progressively reposition the teeth from the last intermediate arrangement to the final tooth arrangement;

wherein the surface of each appliance has a lubricious composition coupled thereto.

40. (New) A system as in claim 30, wherein the appliances comprise polymeric shells having cavities shaped to receive and resiliently reposition teeth from one arrangement to a successive arrangement.

41. (New) A system as in claim 40, wherein the tooth positions defined by the cavities in each successive appliance differ from those defined by the prior appliance by no more than 2 mm.

42. (New) A system as in claim 39, comprising at least two intermediate appliances.

43. (New) A system as in claim 42, comprising at least ten intermediate appliances.

44. (New) A system as in claim 43, comprising at least twenty-five intermediate appliances.

45. (New) A method for repositioning teeth from an initial tooth arrangement to a final tooth arrangement, said method comprising:

placing a first incremental position adjustment appliance in a patient's mouth, wherein the first appliance has a geometry selected to reposition the teeth from the initial tooth arrangement to a first intermediate arrangement;

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successively replacing one or more additional appliances, wherein the additional appliances have geometries selected to progressively reposition the teeth from the first intermediate arrangement to successive intermediate arrangements; and

placing a final appliance into the patient's mouth, wherein the final appliance has a geometry selected to progressively reposition the teeth from the last intermediate arrangement to the final tooth arrangement, wherein the surface of each appliance has a lubricious composition coupled thereto.

46. (New) A method as in claim 45, wherein the appliances comprise polymeric shells having cavities shaped to receive and resiliently reposition teeth from one arrangement to a successive arrangement.

47. (New) A method as in claim 46, where the tooth positions defined by the cavities in each successive appliance differ from those defined by the prior appliance by no more than 2 mm.

48. (New) A method as in claim 45, wherein the successively placing step comprises placing at least two additional appliances prior to placing the final appliance.

49. (New) A method as in claim 48, wherein the successively placing step comprises placing at least ten additional appliances.

50. (New) A method as in claim 45, wherein the successively placing step comprises placing at least twenty-five additional appliances.

51. (New) A method as in claim 45, wherein the appliances are successively replaced at an interval in the range from 2 days to 20 days.

52. (New) An improved method for repositioning teeth using appliances comprising polymeric shells having cavities shaped to receive and resiliently

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reposition teeth to produce a final tooth arrangement, wherein the improvement comprises determining at the outset of treatment geometries for at least three appliances which are to be worn successively by a patient to reposition teeth from an initial tooth arrangement to the final tooth arrangement and coating the interior of each of the polymeric shells with a lubricious composition.

53. (New) An improved method as in claim 52, wherein at least four geometries determined at the outset.

54. (New) An improved method as in claim 53, wherein at least ten geometries are determined at the outset.

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55. (New) An improved method as in claim 54, wherein at least twenty-five geometries are determined at the outset.

56. (New) An improved method as in claim 52, wherein the tooth positions defined by the cavities in each successive geometry differ from those defined by the geometry by no more than 2 mm.